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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/813,274      | 03/31/2004  | Yoshinori Hama       | 251159US0           | 5411             |

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EXAMINER

SHOSHO, CALLIE E

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1714

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/813,274

Applicant(s)

HAMA ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/8/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohta et al. (U.S. 4,597,794).

Attention is drawn to example 2, recording liquid B1 of Ohta et al. that discloses process for preparing aqueous dispersion of pigment comprising kneading a mixture of pigment, organic solvent, water, neutralizer (morpholine), and polymer having salt-forming monomer, i.e. acrylic acid, wherein the mixture has concentration of solid matter of 50% (30/60), adding organic solvent and water to dilute the kneaded mixture, and dispersing the solid matter. There is also disclosed ink comprising the aqueous dispersion of pigment.

In light of the above, it is clear that Ohta et al. anticipate the present claims.

3. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by JP 2004-026927.

Pending formal translation and using a machine translation of the reference, it is noted that JP 2004-026927 discloses process for preparing aqueous dispersion of pigment comprising kneading mixture containing pigment, polymer with salt-forming group, i.e. (meth)acrylic acid, neutralizing agent, organic solvent, and water at 40-70 °C wherein the mixture has concentration of solid matter of 50-80%, adding water and organic solvent to dilute the kneaded mixture, and dispersing the solid matter using microfluidizer, i.e. high pressure homogenizer. There is also disclosed ink comprising the aqueous dispersion of pigment (abstract, paragraphs 1, 13, 20-22, 35, 38-99, 40-45, 48, 53, 57, 63-64, and 74, and example 1).

In light of the above, it is clear that JP 2004-026927 anticipates the present claims.

4. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by JP 2003-226832.

Pending formal translation and using a machine translation of the reference, it is noted that JP 2003-226832 discloses process for preparing aqueous dispersion of pigment comprising kneading mixture containing pigment, polymer with salt-forming group, i.e. (meth)acrylic acid, neutralizing agent, organic solvent, and water wherein the mixture has concentration of solid matter of 50-80%, adding water and organic solvent to dilute the mixture, and dispersing the solid matter using homogenizer. There is also disclosed ink comprising the aqueous dispersion of pigment (claims 1-2 and paragraphs 1, 8, 11, 16, 18, 26, and 34-35).

In light of the above, it is clear that JP 2003-226832 anticipates the present claims.

**Claim Rejections - 35 USC § 103**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. (U.S. 4,597,794).

The disclosure with respect to Ohta et al. in paragraph 2 above is incorporated here by reference.

The difference between Ohta et al. and the present claimed invention is the requirement in the claims that the mixture is kneaded using roll mill.

Example 2 of Ohta et al. disclose process as presently claimed wherein the mixture is kneaded using ball mill, however, there is no disclosure in the example of roll mill as presently claimed.

However, attention is drawn to col.7, lines 41-46 of Ohta et al. that disclose the equivalence and interchangeability of using ball mill with roll mill as kneader to knead mixture.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use roll mill in order to knead the mixture of Ohta et al., and thereby arrive at the claimed invention.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Nakano et al. (U.S. 6,960,622) and Kanou et al. (U.S. 5,913,972) each disclose process for preparing aqueous dispersion of pigment comprising kneading mixture of pigment, polymer having salt-forming group, neutralizing agent, organic solvent, and water, adding water and/or solvent to dilute the mixture, and dispersing the mixture. However, both Nakano et al. and Kanou et al. disclose concentration of solid matter in the mixture outside the scope of the present claims.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
5/13/16